

## Calendar

### Wednesday, January 19

**11:00 a.m.** Fermilab ILC R&D Meeting - 1 West

Speaker: P. Piot, Fermilab

Title: e /e+ Injector Issues for the ILC

**2:30 p.m.** Proton Driver General Meeting - 1 West

Speaker: D. Harris, Fermilab

Title: Neutrino Oscillation Working Group Summary

Speaker: W. Foster, Fermilab

Title: Proton Driver Main Linac Parameter Optimization

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** Fermilab Colloquium - 1 West

Speaker: D. Kleppner, Massachusetts Institute of Technology

Title: How Physics Got Precise

### Thursday, January 20

**2:30 p.m.** Theoretical Physics Seminar - Curia II

Speaker: A. Pierce, Stanford Linear Accelerator Center

Title: The Cosmology of Split Supersymmetry

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

**Wilson Hall Cafe**

## University Groups Help with Accelerator Projects

*This article is the first in a series that will focus on the benefits of Fermilab/University collaboration on different accelerator projects.*



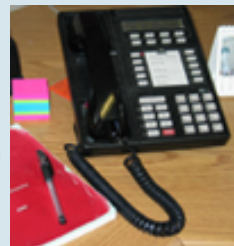
Graduate student Sergei Seletskiy, of the University of Rochester, is now writing his thesis on a project he completed on electron cooling at the Recycler. (Click on image for larger version)

With the future of particle physics leading toward a greater demand for accelerator innovation, Fermilab's Accelerator Division is trying to promote collaboration with universities on accelerator physics. Recently, Roger Dixon, head of the Fermilab Accelerator Division, formed a committee on University/Accelerator Division Collaboration to enhance connections with university groups.

"We're trying to take very different groups and use their strengths," says Sacha Kopp of the University of Texas, who works on the NuMI project and is chair of the new committee. "We're trying to figure out how to promote accelerator science at the university level, promote speculative research, build collaborations, and build on the successes of the currently operating accelerator complex. Universities are interested in intellectually

## Telephone Service Outage

Several areas of the Fermilab site are being affected by a telephone service outage, due to the failure of a buried cable. During this time, if your phone is affected, please be aware that you cannot dial 3131, the Fermilab emergency number. Please plan to make use of cell phones and radios to contact 840-3131 in an emergency.



SBC, Fermilab's telephone service provider, is developing a plan to replace the failed cable. At this

time, telecommunications staff cannot estimate how long this will take. The areas that are without telephone service are portions of the Industrial Complex including the trailers; the Silicon Detector Facility (Labs A-F); New Muon Lab; Site 40; the Training Center; the High Intensity Lab; MW-9 and various other areas of the Meson beam line. Once cable repair begins, other areas of the lab will also lose telephone service. The Business Services Section will provide more information as it becomes available. The telecommunications staff thanks you for your patience and understanding during this frustrating time. Please address questions and concerns to Nan Larson, [nlarson@fnal.gov](mailto:nlarson@fnal.gov), ext. 4550.

**Safety Tips from the Fermilab Fire Department**  
Chim Chim Cheree

## Wednesday, January 19

Italian Wedding with Meatballs

Diner Style Patty Melt \$4.75

Mediterranean Style Baked Fish \$3.75

Beef & Broccoli \$3.75

Greek Chicken Panini with Feta Cheese  
\$4.75

Sicilian Style Pizza \$2.75

Grilled Chicken Bowtie in a Tomato

Cream Sauce \$4.75

### [Wilson Hall Cafe Menu](#)

[Chez Leon](#) will be closed through January  
and February

### Weather



Breezy **36°/21°**

[Extended Forecast](#)

[Weather at Fermilab](#)

### Current Security Status

[Secon Level 3](#)

### Search

**Search the Fermilab Today Archive**

### Info

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[Linear Collider News archive](#)

stimulating projects, but not always aware of the intense pressure required for the accelerator projects."

The committee is charged with recommending ways the lab can build on the many successful examples of Fermilab/University collaborations, such as those in the Tevatron, neutrino programs, MuCool, photoinjector, and linear collider research. The committee consists of Jerry Blazey, George Gollin, Sacha Kopp, Vaia Papadimitriou, Stephen Pordes, Eric Prebys and Mike Syphers. "These collaborations have drawn in researchers from HEP, materials science, and from departments with strong accelerator backgrounds," Kopp says. "Many lab staff have worked hard to develop such partnerships. The hope is to draw more university groups into the lab's programs."

Some collaborations are initiated by Fermilab and others by universities. Vaia Papadimitriou of Fermilab's Accelerator Division and a member of CDF, is one of many Fermilab physicists who helped draft a list of example projects to which universities could contribute. The document is available at the [Beam Documents Database](#). "Cross-fertilization has been very fruitful for experiments, accelerators and the overall atmosphere" she says. "There are many projects out there which are stimulating and fun. In making the list, we tried to make sure that every project has significant educational aspects, a well-defined time scale, a contact person or mentor, and qualities that allow the physicists to write up a technical note when they finish."

**Next: The Booster**



Try to have your chimney professionally cleaned and inspected at least once a year. (Photo Walt Disney Pictures)

Imagine a cold winter night -- you're in your living room, all cozy and warm by your fireplace, when all of a sudden it sounds as if a freight train is coming down the chimney. No, it's not Polar Express. You are experiencing a chimney fire.

Each year thousands of homeowners experience this problem due to improper maintenance of their chimneys. These fires can be prevented by making sure your flue is lined and in good repair. Have it inspected and cleaned regularly by a professional -- Mary Poppins' Dick Van Dyke may still be for hire!

You can also learn how to build fires that reduce the build-up of creosote, a by-product resulting from the incomplete combustion of wood that is often the cause of most chimney fires. Creosote accumulates on the sides of your chimney and later condenses into a solid. As it builds up, it not only blocks the flue but also can ignite into a roaring fire.

You can cut down on the build-up of creosote by burning hard woods such as oak, hickory, ash or maple that have been seasoned for at least one year. Do not burn construction scraps, treated wood, wrapping paper or boughs from evergreens.

## Accelerator Update

### January 14-January 18

- During this 72 hour period operations established 2 stores that, combined with an existing store, provided approximately 63 hours and 1 minute of luminosity to the experiments.
- A broken BPM has stopped the use of the Linac's 400 MeV steering program.
- Recycler stashed antiprotons and then used them for two stores
- A Tevatron separator trip caused a loss of luminosity

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

## In the News

### From *ScienceNews*, January 15, 2005

#### Ultimate Retro: Modern echoes of the early universe

by Ron Cowen

Two teams of astronomers have for the first time detected the surviving notes of a cosmic symphony created just after the Big Bang, when the universe was a foggy soup of matter and radiation. The discoverers say that the survival of the acoustic imprint from this early epoch, 13.7 billion years ago, provides compelling new evidence that the blueprint for the present distribution of galaxies was set at the time of the Big Bang by random subatomic fluctuations.

In 1999, researchers detected a specific pattern of acoustic oscillations in the faint, ancient whisper of radiation—the cosmic microwave background—left over from the Big Bang. This week, Shaun Cole of the University of Durham in England and his colleagues announced that they had

Try to have your chimney professionally clean and inspected at least once a year. When selecting a chimney sweep, make sure that they are certified by the National Chimney Sweep Guild or a trade school. (That might rule Dick Van Dyke out.) Requesting references is always a good idea too.

If you have never had your chimney cleaned and inspected, or if it's been a while, the Fermilab Fire Department encourages you to take these precautions to prevent a chimney fire in your home.

## Announcements

### Upcoming Classes

January 19 - Editing HTML for Admin. Profs.

January 25 & 26 - Behavioral Interviewing (Talent Selection) two half-days

[more information](#)

### URA Scholarship Applications Now Available

Applications are available online. The deadline to apply is March 1.

Scholarships will be awarded in early April. URA Scholarships are awarded on the basis of SAT scores to children of regular, full-time Fermilab employees. Questions about the program may be directed to Jeannelle Smith of Human Resources, x4367.

[more information](#)

### Herman White Presents Fermilab Public Lecture This Friday

The Fermilab Public Lecture Series presents Herman White this Friday at 8:00 p.m. in Ramsey Auditorium, who give the talk, "How Particle Physics Detectors Work and What They Really See." Tickets are \$5.00.

discerned remnants of that pattern while analyzing data from the Two-Degree Field Redshift Gravity Survey, a large-scale analysis of 220,000 galaxies. The map covers one-twentieth the area of the sky out to a distance of 2 billion light-years from Earth.

[read more](#)

#### [more information](#)

##### **Subscribe to Events Newsletter**

To receive email notifications about upcoming cultural events at Fermilab, please sign up for the online newsletter [FermiCulture](#). Subscribers receive approximately five emails per month with information on upcoming arts performances, public lectures, films, etc.

##### **International Folk Dancing**

International Folk Dancing will be held at 7:30 p.m. Thursday, January 20, at the Geneva American Legion Post. Info at 630-584-0825 or 630-840-8194 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).

#### [Upcoming Activities](#)